

Amendments to the Claims:

1. **(Currently Amended)** A method of supporting mobile internet protocol when a mobile system moves from a former routing area to a new routing area and sends to a controlling support node a routing area update message, comprising the steps of:

the controlling support node receiving a routing area update completion message;

the controlling support node responding to ~~receipt~~ said receiving of the routing area update completion message by sending a mobile Internet protocol agent advertisement to the mobile system-, the mobile Internet protocol agent advertisement being the next message after the routing area update completion message to be communicated between the mobile system and the controlling support node.

2. **(Previously Presented)** A method according to claim 1 in which the advertisement includes challenge/response and network access identifier extensions.

3. **(Previously Presented)** A method according to claim 1 in which the advertisement is sent on a traffic channel.

4. **(Previously Presented)** A method according to claim 1 in which a mobile Internet protocol movement detection algorithm detects a change of foreign agent of the mobile system.

5. **(Previously Presented)** A method according to claim 4 in which on detection of a change of foreign agent, said mobile system is registered by mobile internet protocol registration.

6. (Previously Presented) A method according to claim 1 in which the former and new routing areas are within the same or different support networks, and the advertisement is sent after successful sending and receipt of routing area update request, acceptance and completion messages.

7. (Previously Presented) A method according to claim 1 in which the former and new routing areas are within different radio network controllers and the advertisement is sent after successful sending and receipt of radio network controller relocation request and completion messages.